REMARKS

Reconsideration of the above-identified application in view of the present amendment is respectfully requested. Claims 1, 4 and 5 and 13 have been amended.

The specification has been amended to correct minor editorial errors in the detailed description when describing FIGS. 4B and 4C. No new matter has been added.

Claims 4 and 5 have been amended to clarify that at least one of the compliant pin portions is insertable into a through-hole of a circuit board, thereby overcoming the rejection under 35 U.S.C 112. Claim 13 has been amended to add colon after "comprising for better form. Claims 1-13 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Blossfeld (U.S. Patent No. 6,095,555) in view of Coppola (U.S. Patent No. 3,809,838) and Tanishi et al. (U.S. Patent No. 4,731,925).

Claim 1 has been amended to claim that each of the terminals comprise a compliant pin connector for providing a solderless electrical connection. Claim 13 has been amended to claim a means for providing a solderless electrical connection of the rocker switch to the printed circuit board.

Neither Blossfeld nor Tanishi and Coppola disclose or suggest a compliant pin connector that provides a solderless electrical connection and including the other limitations of either claim 1 or claim 13. Blossfeld discloses a rocker switch but with no compliant pin connectors. Tanishi discloses a panel mounted electrical receptacle that has terminal lugs 14 that are inserted into respective holes 31 of

a printed circuit board. Contrary to the examiner's position, each of the terminal lugs 14 is connected to the printed circuit board by soldering (See Tanishi, col. 3, lines 60-65). The terminal lug 64 in the other embodiment of Tanishi is also electrically and mechanically connected thereto by soldering (See Tanishi, col. 5, lines 35-40). Also, with respect to claims 4-9, nowhere in the specification does Tanishi disclose that the through holes 31, 81 have a plated sidewall. Further, none of the other prior art disclose a plated sidewall for each of the through holes.

Coppola discloses a key switch 10 for a keyboard that has mounting posts 60 that only mechanically mounts the key switch 10 to the circuit board 12. The posts 60 are not part of any contacts or terminals and thus do not provide any electrical connection. By contrast, claims 1 and 13 of the present invention as amended claim a compliant pin connector that provides a solderless electrical connection.

Further, to establish a claim of obviousness, there must be some suggestion or motivation to a person having ordinary skill in the art to modify the reference or to combine reference teachings (MPEP §706.02(j)). Moreover, if the proposed combination "would change the principle of operation of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims prima facie obvious." (MPEP §2143.01). There is no suggestion or motivation to combine the teachings of Blossfeld, Tanishi and Coppola to provide the apparatus in claims 1 and 13.

In fact, the contact terminal 10 of Tanishi is shaped to have, at its front end portion, a pair of prongs 11 forming a female contact spring for receiving one of the contact blades. To add this contact terminal to the rocker switch of Blossfeld could result in the first or second arms 90, 92 of rocking contact 80 being caught by the female contact spring, thereby preventing rocking movement of the rocking contact, which would change the principle operation of the rocker switch.

Also, regarding Coppola, the mounting post 60 is used to mount a key switch for a keyboard. This key switch actuates by vertical movement as opposed to the rocking movement of the rocker switch in Blossfeld. In fact, the key switch of Coppola includes spacing rings 74 and dots 72 to prevent any rocking of the key switch (See Coppola, col. 4, lines 16-31). To combine the mounting post of Coppola with the rocker switch of Blossfeld would change the principle operation of the key switch of Coppola.

Even if there were some motivation to combine teachings of Blossfeld, Tanishi and Coppola, this combination still does not teach or suggest all the limitations in claims 1 and 13. Blossfeld discloses a rocker switch but with no compliant pin connectors. Tanishi discloses a panel mounted electrical receptacle that has terminal lugs 14 that are soldered to a printed circuit board. Coppola discloses a key switch 10 for a keyboard that has mounting posts 60 that only mechanically mounts the key switch 10 to the circuit board 12. Thus, the combination of Blossfeld, Tanishi and Coppola does not teach or suggest a compliant pin connector that provides a

solderless electrical connection and including the other limitations in either claim 1 or 13.

Therefore, due to the reasons expressed above, claims 1 and 13 should be allowable. Claim 2, which depends from claim 1, should be allowed for the same reasons as claim 1 and also for the additional feature that the apparatus includes a third contact maintained in continuous engagement with the rocking contact. The rocking contact provides electrical contact between the first and third contacts when the first arm moves into engagement with the first contact. The rocking contact also provides electrical contact the second and third contacts when the second arm moves into engagement with the second contact. The third contact comprises a terminal for helping to mount the apparatus and the terminal comprises a compliant pin connector. None of the cited prior art describes or suggests this feature and including all the limitations of claim 1. Therefore, claim 2 is also allowable.

Claim 3, which depends from claim 2, should be allowed for the same reasons as claim 2 and also for the additional feature that the apparatus includes a base for supporting the rocking contact, the actuator, and the first, second, and third contacts. The terminals of the first, second, and third contacts protrude from a lower surface of the base. None of the cited prior art describes or suggests this feature and including all the limitations of claim 2. Therefore, claim 3 is also allowable.

Claim 4, which depends from claim 2, should be allowed for the same reasons as claim 2 and also for the additional

feature that at least one of the compliant pin portions is insertable into a through-hole of a circuit board. The through-hole has a plated side wall. The one of the compliant pin portions comprises spaced deflectable beam portions having outer surfaces spaced apart a distance greater than the spacing of the opposing surfaces of the side wall. The beam portions engage the side wall and deflect toward each other and thus provide a frictional engagement between the beam portions and the side wall when the one of the compliant pin portions is inserted in the through-hole. The frictional engagement provides a retention force for retaining the one of the compliant pin portions in the through-hole and thereby helps to connect the apparatus to the circuit board. None of the cited prior art describes or suggests this feature and including all the limitations of claim 2. Therefore, claim 4 is also allowable.

Claim 5, which depends from claim 4, should be allowed for the same reasons as claim 4 and also for the additional feature that the one of the compliant pin portions further comprises an opening extending through the one of the compliant pin portions and defining curved inner surfaces of the beam portions opposite the outer surfaces. The inner surfaces being presented face each other. None of the cited prior art describes or suggests this feature and including all the limitations of claim 4. Therefore, claim 5 is also allowable.

Claim 6, which depends from claim 4, should be allowed for the same reasons as claim 4 and also for the additional

feature that the portions of the outer surfaces of the beam portions define central interface portions of each of the beam portions. Each of the interface portions include an interface surface formed on the outer surfaces of the beam portions and face away from each other. None of the cited prior art describes or suggests this feature and including all the limitations of claim 4. Therefore, claim 6 is also allowable.

Claim 7, which depends from claim 6, should be allowed for the same reasons as claim 6 and also for the additional feature that the interface surfaces provide the frictional engagement with the side wall of the through-hole. None of the cited prior art describes or suggests this feature and including all the limitations of claim 6. Therefore, claim 7 is also allowable.

Claim 8, which depends from claim 4, should be allowed for the same reasons as claim 4 and also for the additional feature that the apparatus is free from means for connecting the apparatus to the printed circuit board other than the compliant pin connectors. None of the cited prior art describes or suggests this feature and including all the limitations of claim 4. Therefore, claim 8 is also allowable.

Claim 9, which depends from claim 4, should be allowed for the same reasons as claim 4 and also for the additional feature that the compliant pin connectors provide a solderless and adhesive-free connection between the apparatus and the printed circuit board. None of the cited prior art describes or suggests this feature and including all the limitations of claim 4. Therefore, claim 9 is also allowable.

Claim 10, which depends from claim 1, should be allowed for the same reasons as claim 1 and also for the additional feature that the apparatus comprises a rocker switch. None of the cited prior art describes or suggests this feature and including all the limitations of claim 1. Therefore, claim 10 is also allowable.

Claim 11, which depends from claim 1, should be allowed for the same reasons as claim 1 and also for the additional feature that the apparatus further comprises third and fourth spaced contacts and a second rocking contact having third and fourth arms in electrical contact with each other. The second rocking contact is supported for rocking movement in opposite first and second directions. The third arm moves into engagement with the third contact when the second rocking contact rocks in the first direction. The fourth arm moving into engagement with the fourth contact when the second rocking contact rocks in the second direction. The actuator is pivotable to effectuate rocking movement of the second rocking contact in the first and second directions. The third and fourth contacts each comprise a terminal for helping to mount the apparatus and the terminals each comprise a compliant pin connector. None of the cited prior art describes or suggests this feature and including all the limitations of claim 1. Therefore, claim 11 is also allowable.

Claim 12, which depends from claim 11, should be allowed for the same reasons as claim 11 and also for the additional feature that the apparatus further comprises a fifth contact

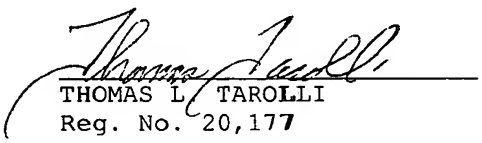
maintained in continuous engagement with the rocking contact and a sixth contact maintained in continuous engagement with the second rocking contact. The rocking contact provides electrical contact between the first and fifth contacts when the first arm moves into engagement with the first contact. The rocking contact provides electrical contact between the second and fifth contacts when the second arm moves into engagement with the second contact. The fifth contact comprises a terminal for helping to mount the apparatus and the terminal comprises a compliant pin connector.

The second rocking contact providing electrical contact between the third and sixth contacts when the third arm moves into engagement with the third contact. The second rocking contact provides electrical contact between the fourth and sixth contacts when the fourth arm moves into engagement with the fourth contact. The sixth contact comprises a terminal for helping to mount the apparatus and the terminal comprises a compliant pin connector. None of the cited prior art describes or suggests this feature and including all the limitations of claim 11. Therefore, claim 12 is also allowable.

In view of the foregoing, it is respectfully submitted that the above-identified application is in condition for allowance, and allowance of the above-identified application is respectfully requested.

Please charge any deficiency or credit any overpayment in the fees for this amendment to our Deposit Account No. 20-0090.

Respectfully submitted,



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